We claim:

1. A process comprising:

(a) spinning molten poly(trimethylene terephthalate) polymer having a number average molecular weight of at least about 26500 and a melt viscosity of at least about 350 Pascals at 250°C and 48.65 per second shear rate;

(b) converging the filaments into yarn;

(c) cooling the filaments; and

drawing the filaments at a speed of greater than 3000 meters per minute to produce filaments having a filament denier greater than 1 and yarn having a yarn denier greater than 210.

2. The process of claim 1, wherein the number average molecular weight is from about 26500 to about 50000.

3. The process of claim 1, wherein the number average molecular weight is from about 27500 to about 45000.

4. The process of claim 1, wherein the number average molecular weight is from about 29000 to about 40000.

5. The process of claim 1, wherein the melt viscosity is from about 350 to about 1000 Pascals at 250°C and 48.65 per second shear rate.

6. The process of claim 1, wherein the melt viscosity is from about 400 to about 900 Pascals at 250°C and 48.65 per second shear rate.

7. The process of claim 1, wherein the melt viscosity is from about 450 to about 800 Pascals at 250°C and 48.65 per second shear rate.

8. The process of claim 1, wherein the melt viscosity is from about 500 to about 700 Pascals at 250°C and 48.65 per second shear rate.

9. The process of claim 1, wherein the filament denier is at least 3.

10. The process of claim 1, wherein the filament denier is at least 10.

11. The process of claim 1, wherein the filament denier is at least 15.

12. The process of claim 1, wherein the yarn denier is at least 250.

13. The process of claim 1, wherein the yarn denier is at least 500.

14. The process of claim 1, wherein the yarn denier is at least 1000.

15. The process of claim 1, wherein the filaments are drawn at a speed of greater than 3500 meters per minute.

16. The process of claim 1, wherein the filaments are drawn at a speed of greater than 4000 meters per minute.

17. The process of claim 1, wherein the filaments are drawn at a speed of greater than 5000 meters per minute.

18. The process of claim 1, wherein the filaments are drawn at a speed of at least 5100 meters per minute.

19. The process of claim 1, wherein the filaments are drawn at a speed of at least 5500 meters per minute.

20. The process of claim 1, further comprising coating the filaments with a spin finish and optionally preintermingling the filaments.

21. The process of claim 1, further comprising bulking the drawn filaments.

22. The process of claim 21, further comprising entangling the filaments.

23. The process of claim 21, wherein the drawn filaments are bulked to form 3-dimensional curvilinear crimp therein.

24. The process of claim 23, wherein the bulking comprises blowing and deforming the filaments in a hot-fluid jet bulking unit.

25. The process of claim 1, wherein the filaments are drawn at a draw ratio of about 1.1 to about 4.0.

26. The process of claim 25, wherein the draw ratio is about 1.2 to about 3.0.

27. The process of claim 25, wherein the draw ratio is about 1.4 to about 2.2.

28. The process of claim 1, wherein the poly(trimethylene terephthalate) has an intrinsic viscosity of about 0.95 to about 1.10.

29. The process of claim 28, wherein the intrinsic viscosity is about 0.98 to about 1.04.

30. The process of claim 28, wherein the intrinsic viscosity is about 1.00 to about 1.02.

31. A process comprising:

(a) extruding molten poly(trimethylene terephthalate) polymer having an intrinsic viscosity in the range of about 0.95 to about 1.10, a water content of less than about 100 ppm, a number average molecular weight of about 26500 to about 50000 and a melt viscosity of about 350 to about 1000 Pascals at 250°C and 48.65 per second shear rate through a spinneret to form filaments;

(b) converging the filaments into yarn;

(c) cooling the extruded filaments;

(d) coating the cooled filaments with a spin finish; optionally pre-intermingling the filaments;

(e) optionally heating the coated filaments to a temperature greater than the glass transition temperature of the polymer filaments, but less than about 200°C;

(f) drawing the optionally heated filaments at a speed of greater than 3000 meters per minute to produce filaments having a denier greater than 1 and yarn having a yarn denier greater than 210;

(g) bulking the drawn filaments such that the filaments are blown and deformed in three dimensions with a hot bulking fluid to form bulked continuous filaments having random 3-dimensional curvilinear crimp;

(h) cooling the bulked continuous filaments to a temperature less than the glass transition temperature of the polymer filaments; and

(i) entangling the bulked continuous filaments.

32. The process of claim 31, wherein the water content is less than about 50 ppm.

33. The process of claim 31, wherein the water content is less than about 40 ppm.

34. The process of claim 31, wherein the bulked continuous filaments of (g) are entangled before the cooling in (h).

35. The process of claim 31, wherein the filaments are drawn at a speed of at least 3000 meters per minute.

36. The process of claim 31, wherein the filaments are drawn at a speed of greater than about 3500 meters per minute.

37. The process of claim 31, wherein the filaments are drawn at a speed of at least about 4000 meters per minute.

38. The process of claim 31, wherein the filaments are drawn at a speed of at least 5000 meters per minute.

39. The process of claim 31, wherein the filaments are drawn at a speed of at least 5100 meters per minute.

40. The process of claim 31, wherein the filaments are drawn at a speed of at least 5500 meters per minute.

41. The process of claim 31, further comprising ply-twisting and heat setting the filaments into yarn.

42. Carpet made from the ply-twisted, heat-set poly(trimethylene terephthalate) yarn of claim 41.